

AMA Guides to the Evaluation of Permanent Impairment,
The 5th and 6th Editions Comparison: a failed paradigm shift

John E. Nimlos MD November 17, 2010

Written testimony to the House Committee on Labor and Education,
Sub-Committee on Worker Protection

Executive Summary

This presentation will show that the *AMA Guides to the Evaluation of Permanent Impairment, Fifth Edition* remains the preferred reference for impairment rating, as the 6th Edition is a disruptive document with many more disadvantages than improvements. Over the 10 years of its publication, the 5th Edition has effectively guided a national cadre of experienced physician raters. In contrast, the 6th Edition requires a complicated, multistep process for each rating. If the new, time-consuming process leads to better, more scientific, and more accurate ratings, it might be worth it. It does not.

The 6th edition, despite making major changes to ratings, mostly downward, has no more science behind it than the 5th. In fact, there appears to be less science. Therefore, relying on the 6th Edition will lead to greater expense: training doctors, system adjustment to the new impairments, increased litigation, and increased wage replacement cost due to delays in claim resolution. In contrast, if the 5th Edition shows consistent problems in one or another area, and some rational science becomes available to address those, addenda can be added cheaply and efficiently.

If there are multiple areas scientifically shown to need improvement, a “5th Edition-Revised” can be provided. Until such time, continued use of the *AMA Guides* 5th Edition generates no new expenses, can be adjusted to reflect new science if needed, and allows systems using the *Guides* to continue the adjudication decisions, standards, and adjustments already in place. The simple decision to retain the 5th Edition eliminates the considerable time and expense of dealing with a new system that has no proven value or reliability.

Introduction

I am a medical doctor specializing and board certified in Occupational Medicine. I treat employees for injuries and illness incurred in the workplace. For 24 years, I’ve examined workers under two different state workers’ compensation systems, as well as federal employees under the FECA and Longshore and Harborworkers programs. I make decisions every day about impairment, and disability.

I am familiar with all editions of the Guides, and used the 3rd, 3rd (Revised), 4th, 5th and 6th to determine impairment ratings, as well as using Washington State’s impairment system. I have taught doctors about impairment ratings and explained ratings to patients for many years. I can

state that the 6th Edition is dramatically different from the prior editions, and as the authors say, a paradigm shift.

Impairment and Disability are not the same

These two words are frequently used interchangeably, but they actually have importantly different meaning. *Impairment* refers to a *loss of function*. It simply means, for example, that the grip is weak, or that the arm has less mobility. *Disability* refers to the *effect of the impairment* on the ability to perform a job or specific task.

For example, I injured my shoulder years ago. My arm was so weak, I could hardly lift a gallon of milk, I couldn't reach higher than the level of my chest. I was *impaired*. I could do all my work as a doctor, so I was *not disabled*. However, if I were a carpenter with the *same impairment*, I'd be both *impaired* and *disabled*. The *AMA Guides to the Evaluation of Permanent Impairment* have been in existence for 40 years and are used to rate the extent of *impairment*. Doctors' impairment ratings a measurement of how much loss of function is present. It refers to limits to everyday living tasks, common to all people. Disability is how that impairment affects a person's job. Impairment rating percentages are just the beginning of disability determination. Disability rating or compensation, depends on how each system applies its own rules and process to come to a monetary amount or qualification for benefits.

The 6th Edition greatly increases the complexity of impairment ratings

The 6th edition uses the same structure and method for all of the different body parts and systems. Though this is intended to make it more consistent, it also makes it difficult to fit the rating process to the rated part, and reduces the role of the examining doctor to best reflect the actual limitations for the claimant he or she is evaluating. In addition, because of this rigid adherence to structure, impairment ratings which are easy and straightforward under the 5th Edition are made needlessly complex.

For 6th Edition ratings I charge extra; I find this methodology clumsy and extremely difficult to work with. Every rating under the 6th Edition takes several steps, regardless of how straightforward rating a patient could be. After the examination, plus a required patient questionnaire to score, the doctor first goes to a chart for the diagnosis. The diagnosis has a number associated with it. It also has a range from A through E, with C being the middle, and the default impairment rating that is meant to represent the average impairment for that diagnosis. Then he must find three other charts for 1) examination results, 2) test results, and the 3) claimant's function. Applying estimates from "no problem" to "severe" in each chart, the doctor gets numbers from these three, and subtracts each number from the number assigned to the diagnosis, then adds those three results together. The result is added or subtracted from the number on the diagnosis chart. This sum is the number that determines how far up or down the narrow A through E range that determines the final rating, as adjusted from the average for that diagnosis.

By contrast, the 5th Edition rating requires physical examination and tests. With the medical information, he or she goes to a table for each measurement or claimant characteristic, and matches the claimant's measurement or description with an impairment percent from the table. Sometimes there is more than one table, but even then, for most cases it's not that difficult. With some guidance, many cases can be rated by an attending doctor. I've even given phone instructions to doctors, enabling them to do ratings successfully with the patient or medical record in front of them.

The 6th Edition still uses consensus-based estimates for impairment rating that are no more scientific, and with non-medical factors now present in these estimates, there is even less medical science in this edition than previously.

The 6th Edition is controversial for another reason. Though it claims to be, it is not really evidence-based. It produces impairment ratings far different from those in prior editions, most of them lower than before, it without adequate support for doing so. In the course of evaluation of the 6th Edition for the state of Iowa, Mr. Matthew Daker, and Dr. John Kuhnlein, the authors of both evaluations that I found for review also concluded with the advantage of author interviews, that there remained too many obstacles to effective and reliable ratings. The authors admitted that there was no more scientific evidence brought to bear in the 6th edition, and noted the influence of insurance and adjudicators in the adding of very low, once-in-a-lifetime ratings so that people could qualify as having impairments, perhaps a minimal response to requests from plaintiff groups for at least some recognition of conditions previously given zero impairment.

I suspect that Dr. Brigham's assertions that ratings are too high (his estimate at 8% too high) also had to do with the consensus estimates of the 6th Edition authors. Dr. Brigham's assertions about the distortion of ratings are based on his own studies. The material from those studies are taken from his practice in reviewing ratings sent to him for analysis. Dr. Brigham's advertisements appear clearly to focus on the defense (employer, workers comp insurer, defense attorney) population, so it is likely that the only clients who would be spending the \$150 fee would be those for whom they thought would save that at least that amount by finding out about a rating suspected to be too high. In that setting, ratings too low, or that were appropriate would not likely show up in his numbers.

In contrast to this, I have a series 401 consecutive independent medical examination (IME) reports received by me as attending physician, or reviewed by request from other physicians who my review of the IME's to advise the doctors whether to agree or not with the report. In this series, I found that 45% of the IME's were valid. The remainder had serious flaws, for a variety of reasons, one of them being incorrect impairment ratings. The majority of errors had to do with rating, and every rating but one was *too low*. Unlike Dr. Brigham's study, mine was only selected by my presence in the case as attending physician, or were sent by physicians with only the interest in knowing the accuracy of the report, not by whether the rating was too high or low. In light of this, I question the validity of Dr. Brigham's assertions about ratings too high. Dr. Brigham's population suggested 89% of ratings to be too high. Another said that 78% of ratings

were incorrect, and again, too high. My study showed essentially 99% of ratings to be *too low*. My data are in agreement with another study of 17 patient ratings. Though the patient number was disappointingly low, this was the only one I could find in a literature search for peer-reviewed reports on IME quality. It is a sad comment on the role of science in the *AMA Guides*, that I found more information about these issues in a Google search than I did by searching the medical literature by PubMed (The National Library of Medicine).

Lastly, though the authors of the *Guides* do refer to evidenced based research in the 6th Edition, the only studies they could find were deemed unreliable for use as impairment rating information, and that further research was required. The only approach in the 6th Edition that has to do with evidence is the assertion that the diagnosis used for rating be made based on evidence. Perhaps this edition's authors somehow believe that doctors making diagnoses for prior editions' were not based on evidence.

Many of the 6th Edition ratings are different, with no explanation of why the rating is changed. Most changes are to a lower rating, some are far lower.

With regard to medical reliability, there seem to be many unexplained rating changes in this new Edition compared with the earlier editions of the *Guides*. Questions arise about the ratings recommended by the Sixth Edition. For example, why is the impairment rating for a total knee replacement with “good” result 37% in the 5th Edition and 25% in the 6th Edition? Is that evidence based, as the 6th Edition purports to be? No, the rationale for this particular rating is, as expressed by Dr. Chris Brigham, Senior Contributing Editor for the 6th Edition, who has stated that the “improvement in medical technology” is the reason for the lower rating.

Though this suggests that some science backs up the lower rating. However, the actual process of rating determination is different between the two editions. The 5th Edition appears to actually draw *more* upon science than the Sixth. In the 5th edition, the “good” rating is defined by a numerical score derived from several measurements, and used by orthopedic surgeons as a recognized standard for describing and categorizing knee replacement outcomes. In the 6th Edition, the “good” definition uses undefined degrees of outcome measures, *e.g.* “mild”, “good”, “severe” *usw.* These are imprecise at best, and subject to the judgment and/or bias of the examiner.

The total knee replacement decrease in impairment is not alone. In my own analysis of ratings coming from the AMA's publication by Dr. Chris Brigham, *The Guides Casebook*, 3rd Edition, selecting all the extremity ratings, as in Washington the *Guides* are prescribed for rating these, and a couple others due to their common occurrence as rating questions. Of the total of 35 ratings examined, only 6 ratings went down in the 5th compared to the 4th Ed. Those ratings averaged less than one fifth (19%) lower than the 4th Edition. In contrast, 21 of 35 ratings go down in the 6th compared to the 5th; 3-and-a-half times *more ratings* are made lower by the 6th Edition than were reduced in the 5th. And, in the 6th Edition, not only are more ratings reduced, but they are

made lower by an average of more than a two fifths (36%) – almost twice the magnitude of decrease amount of the impairment ratings.

My analysis is not the only one that does this. Dr. Melhorn did an analysis of selected diagnoses comparing 5th and 6th edition ratings, demonstrating the rating averages to be lower for the Sixth edition, though at a less dramatic amount. However, if he'd gotten the arithmetic accurately, he'd had shown a more significant difference between the average rating in the 6th from the 5th than appears in his tables found in his article in the IAIABC Journal.

Lastly, a large number of ratings, 52, were examined by Sedgwick Claims Management Services for the state of North Dakota involving extremities and spine as well as multi-injury cases. Six ratings were the same or slightly higher by the 6th edition. The other 46 ratings were lower, many much lower. On average by body region, ratings were 0.8% higher for ratings of the Hand to 12.6% lower for the Cervical Spine. This does not mean that the rating was 12.6% lower as in lowered by about 1/8 of the rating, it means that the average rating went from 24.8% to 12.2%. These are very large differences. When compared in order of magnitude of initial 5th edition rating, the lowering of the impairment rating was much more dramatic as the 5th edition ratings that were higher. For ratings in the highest range, the average for 5th Edition was 67% impairment, in the 6th edition, the same cases averaged 44.7%. This is a decrease of nearly one third.

Another study of 200 cases from Dr. Brigham was also reviewed showing many lower ratings in the 6th edition, in similar magnitudes. This is particularly interesting in light of my recall from Dr. Brigham stating that he did not think the 6th edition would result in many reduced ratings, and that whether or not it would remains to be seen. By virtue of his own recent report in *The Guides Newsletter**, as cited by, and providing the above statistics from, in the Sedgwick report

The Sedgwick report goes on to estimate that using the 6th edition. The conclusion was that North Dakota would save \$1.1 million dollars in permanent partial impairment awards by adopting the 6th Edition. This was immediately followed by a statement that asserted, “The 6th Edition of the AMA Guides to the Evaluation of Permanent Impairment is the latest version of the Guides and is the result of the evolution of medical science as well as research based medicine.” As thorough as the report is in many respects, it appears the report authors did not investigate the assertion of science and research as the basis for the 6th edition, and were likely to convey to the decision makers for North Dakota an opinion that is not supported by the facts.

It will be expensive and difficult to maintain an adequate population of qualified doctors for impairment ratings under the 6th Edition.

In my home state of Washington, more ratings by attending doctors are desired. I know from my experience in encouraging primary and specialty doctors to do ratings for their own patients, that it is already difficult to get treating doctors to embrace impairment rating and the *Guides*. Most step back slowly if I bring out the book, but I believe they will *run* from the complicated, multistep arithmetic and rules of the 6th Edition. Doctors are quite familiar with the 5th Edition,

and the system has begun to find stability with the 5th Edition. The 6th Edition's methods are dramatically different from the prior systems, and already throw controversy and error into systems relying on their use. Adding the 6th Edition's untested, and unproven departure from the format used for the past 40 years, doesn't seem worth the disorientation it will cause.

6th Edition ratings take much more time, and likely will add to rating examination expense.

Dr. J. Mark Melhorn, an orthopedic doctor from Kansas, a contributor to the 6th Edition *Guides* conducted an informal study on the time consumed in ratings. He found that 7 expert raters who teach other doctors how to use the *Guides*, doing identical sample cases, averaged 5 minutes to rate by 5th Edition, but to do 6th Edition ratings they averaged 25 minutes. Because of this additional time and hassle, I charge an extra fee for 6th Editions ratings that adds between 15 and 20% to the cost of the examination. Other doctors who do ratings will need to pay for the additional training and certifications costs, and are likely to pass this cost along to their clients.

Especially at the beginning, disagreement about ratings is likely to occur resulting in additional costs for IME's and/or legal expense.

Physician clinical judgment remains the hallmark of impairment ratings, it is greatly restricted in the 6th Edition, but with no science to back up that decision, or the altered ratings.

Thus, it appears that the transition from the 5th to the 6th Edition shows much more pervasive and dramatic changes to ratings than previous edition changes. I believe that the previous edition changes generally provided improvements. The changes in the 6th edition are many and large. If adopted generally, the 6th edition of the *AMA Guides* will disrupt disability systems, increase examination costs, increase litigation expenses and seriously threaten fair compensation for injured workers.

In light of all these issues, I agree with the states of Iowa, Kentucky, Washington, Colorado, Utah and others, that the 5th Edition should remain in use, until something truly better comes along.

* Brigham CR, Uejo C, McEntire A, Dilbeck L. Comparative Analysis of *AMA Guides* Ratings by the Fourth, Fifth, and Sixth Editions. *Guides Newsletter*. January - February 2010.

Complete annotated bibliography will follow.